

1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3
4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
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8 *Ex parte* NEVEIN T. SULTAN,
9 DWIGHT D. JAMIESON, and
10 VALERIE A. SIMPSON
11

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13 Appeal 2009-008506
14 Application 09/899,265
15 Technology Center 3600
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18 Decided: April 20, 2010
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21 Before MURRIEL E. CRAWFORD, HUBERT C. LORIN, and
22 ANTON W. FETTING, *Administrative Patent Judges*.
23 FETTING, *Administrative Patent Judge*.

24 DECISION ON APPEAL

1 STATEMENT OF THE CASE

2 Nevein T. Sultan, Dwight D. Jamieson, and Valerie A. Simpson
3 (Appellants) seek review under 35 U.S.C. § 134 (2002) of a final rejection of
4 claims 1-8, 10-15, 17-25, and 27-31, the only claims pending in the
5 application on appeal.

6 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b)
7 (2002).

8 SUMMARY OF DECISION¹

9 We REVERSE.

10 THE INVENTION

11 The Appellants invented a policy based traffic forwarding control within
12 a data network (Specification 7:¶ 0017).

13 An understanding of the invention can be derived from a reading of
14 exemplary claim 1, which is reproduced below [bracketed matter and some
15 paragraphing added].

16 1. A method of enabling policy-based traffic forwarding in a
17 data network having at least two area border routers (ABRs),
18 the method comprising steps of:

19 [1] generating a link state advertisement (LSA) message, and

¹ Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed August 15, 2008) and Reply Brief ("Reply Br.," filed December 16, 2008), and the Examiner's Answer ("Ans.," mailed November 3, 2008).

asserting a route tag in respect of the generated LSA message; and

[2] at each ABR receiving the LSA message,

controlling propagation of the received LSA,
into an area of the data network hosted by the ABR,
using a respective forwarding policy

having a match criteria corresponding to the asserted route tag;

[3] wherein the respective forwarding policy of a first ABR differs from that of a second ABR,

such that the received LSA message is flooded into the area hosted by the first ABR, and

not flooded into the respective area hosted by the second ABR.

THE REJECTION

The Examiner relies upon the following prior art:

Zhang US 6,275,492 B1 Aug. 14, 2001

Claims 1-8, 10-15, 17-25, and 27-31 stand rejected under 35 U.S.C.

§ 102(e) as anticipated by Zhang.

ARGUMENTS

The Appellants argue these claims as a group. Accordingly, we select claim 1 as representative of the group. 37 C.F.R. § 41.37(c)(1)(vii) (2008).

The Appellants contend that a route tag is not a destination address (Appeal Br. 5), that specifically forwarding packets to a destination address is entirely different from flooding link state advertisements (LSAs) into an area hosted by an area border router (ABR) (Appeal Br. 6), that calculating

1 routes to various destinations using a received LSA, and controlling
2 propagation of a received LSA are radically different and entirely
3 independent functions (Appeal Br. 7), and that since an LSA contains no
4 destination address, one cannot use an LSA to control propagation of
5 received LSAs (*id.*).

6 ISSUES

7 The issue of whether the Examiner erred in rejecting claims 1-8, 10-15,
8 17-25, and 27-31 under 35 U.S.C. § 102(e) as anticipated by Zhang turns on
9 whether Zhang describes a forwarding policy of a first ABR that differs
10 from that of a second ABR, such that a received LSA message is flooded
11 into the area hosted by the first ABR, and not flooded into the respective
12 area hosted by the second ABR.

13 FACTS PERTINENT TO THE ISSUES

14 The following enumerated Findings of Fact (FF) are believed to be
15 supported by a preponderance of the evidence.

16 *Facts Related to the Prior Art*

17 *Zhang*

18 01. Zhang is directed to routing data through one or more networks.

19 Zhang routes data packets through a network using router
20 identification information contained in the data packets. Zhang
21 1:9-13.

22 02. Zhang several two protocols. One, the link state advertisement
23 (LSA) protocol is implemented by having routers send
24 information regarding the network apology to the nodes. Another

1 protocol, referred to as tag switching, forwards data packets based
2 on tags inserted into the data packet rather than based on the
3 packet's destination address. Zhang 1:26-60.

4 03. Based on the information received in LSA's, each router
5 calculates routes to various destinations in the network. In
6 addition to maintaining a routing table of routes to various
7 destinations, each router maintains a routing table in each area for
8 all Area Border Routers (ABRs) in the area. Zhang 3:42 – 4:22.

9 04. Zhang describes a composite of the two protocols by using
10 existing router IDs to perform the function of a route tags. The
11 route identifiers are transmitted automatically by advertisement of
12 LSAs. Zhang 4:59-67.

13 PRINCIPLES OF LAW

14 *Anticipation*

15 "A claim is anticipated only if each and every element as set forth in the
16 claim is found, either expressly or inherently described, in a single prior art
17 reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628,
18 631 (Fed. Cir. 1987).

19 "When a claim covers several structures or compositions, either
20 generically or as alternatives, the claim is deemed anticipated if any of the
21 structures or compositions within the scope of the claim is known in the
22 prior art." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001).

23 "The identical invention must be shown in as complete detail as is
24 contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226,

1 1236 (Fed. Cir. 1989). The elements must be arranged as required by the
2 claim, but this is not an *ipsissimis verbis* test, *i.e.*, identity of terminology is
3 not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

4 ANALYSIS

5 The Appellants' argument is essentially that the Examiner's analysis
6 conflates the transmission of LSAs and messages. We agree with the
7 Appellants. The Examiner's analysis at Ans. 6 describes each of the
8 protocols. The Examiner correctly observes that when a router receives a
9 data packet it determines from the route tag whether the data packet is
10 destined for each domain by matching the switch tag information to its own
11 information, and that if a data packet is not destined for the routers domain,
12 the data packet is sent to a router of a different domain.

13 The Examiner then erroneously concludes that this sequence applies to
14 transmissions of LSAs. The transmission of LSAs is independent of source
15 to destination message transmission and uses a protocol different from that
16 of source to destination message transmission. As the Appellants argue, the
17 transmission of LSAs is simply proximity-based, transmitting from one
18 router to another router that is connected next in sequence. FF 02-03. Thus,
19 the Examiner's inference that the protocol recited in claim 1 limitation [3] is
20 inherent in existing packet transmission protocols is in error by assuming
21 that the LSA transmission carries with it a destination address that directs
22 selection of Area Border Routers (ABRs).

CONCLUSIONS OF LAW

The Examiner erred in rejecting claims 1-8, 10-15, 17-25, and 27-31 under 35 U.S.C. § 102(e) as anticipated by Zhang.

DECISION

To summarize, our decision is as follows.

- The rejection of claims 1-8, 10-15, 17-25, and 27-31 under 35 U.S.C. § 102(e) as anticipated by Zhang is not sustained.

REVERSED

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